

# MONTHLY NOTICES

## OF THE

# ROYAL ASTRONOMICAL SOCIETY.

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VOL. LX.

MAY 11, 1900.

No. 8

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E. B. KNOBEL, Esq., PRESIDENT, in the Chair.

Alexander Foote, J.P., F.S.A. Scot., 111 Warwick Road,  
Earl's Court, S.W., and Mall Park, Montrose, Scotland ;  
and

Désiré Ernest Lebon, Agrégé de l'Université, Professeur de  
Mathématiques au Lycée Charlemagne, 4 bis, rue des  
Écoles, Paris,

were balloted for and duly elected Fellows of the Society.

The following candidates were proposed for election as Fellows  
of the Society, the names of the proposers from personal know-  
ledge being appended :—

Arthur H. Baker, B.A., Headmaster Basnett Road Board  
School, Lavender Hill, S.W. ; and 28 Cautley Avenue,  
Clapham Common, S.W. (proposed by Thomas Lewis) ;

William Henry Colegrave, Master Mariner (P. & O. Service),  
Little Tew, Enstone, Oxford (proposed by Duncan Forbes) ;  
and

Guy François Comte Meredyth de Miremont, Orleans Club,  
St. James's, London, S.W. (proposed by Duncan Forbes).

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Fifty-two presents were announced as having been received  
since the last meeting, including amongst others :—

F. K. Ginzel, Specieller Kanon der Sonnen- und Mondfinster-  
nisse, presented by the author ; Harvard Observatory, *Annals*,

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vol. xlv. (E. C. Pickering, Revision of the Harvard Photometry), presented by the Observatory; Royal Observatory, Lisbon, O Eclipse de Sol de 1900 Maio 28, presented by the Observatory; Facsimile of Captain Cook's original Observation of the Transit of *Venus*, 1769 (lantern slide), presented by Rev. E. Ledger.

*On the Alleged Rotation of the Spiral Nebula Messier 51 Canum Venaticorum.* By H. H. Turner, M.A., F.R.S., Savilian Professor.

In his recently published second volume of *Photographs of Stars, Star Clusters, and Nebulae* Dr. Isaac Roberts gives measures of a photograph of M 51, taken in 1898, and a comparison with Lord Rosse's measures in 1872-74, whence he suggests that the nebula has rotated round its central nucleus through over 100' in 47 years. As a movement of this magnitude in a nebula, if well established, is naturally of the first importance, I wrote to Dr. Roberts asking for particulars as to his determination of the zero of position-angle. He very kindly sent me full particulars and a copy of the original negative. On this copy I found that there were three Groombridge stars, also contained therefore in the Radcliffe (1845'0) Catalogue; and that these have been recently observed at Greenwich and will appear in the forthcoming Ten-year (1890'0) Catalogue. Places of these stars, which were kindly supplied by the Astronomer Royal, give an independent check on the zero of position-angle, and my measures of the plate indicate a zero differing by about a degree from that of Dr. Roberts. This would mean that a large part, if not the whole, of the movement assigned by him to the nebula may be due to instrumental error.

The reasons for believing that the position-angles are affected with systematic error were given in full, as was only proper in challenging the accuracy of the work of another astronomer; and I wrote to Dr. Roberts informing him of my results. He lost no time in re-examining the question, and I received from him, under date May 8, the following letter:—

“Referring to the spiral nebula M 51 *Canum*, I have obtained two photographs upon which are *star-trails*: one trail on each plate extends across the nebula. By measurements from these I find a difference of 1° 19' in the zero of the centre of the nebula when it is compared with the zero deduced by interpolated trails, upon which I relied in the measurement of position-angles published in my second volume. Consequently the position-angles therein given on pp. 25 and 109 are 1° 19' in excess, and this correction will have to be applied when comparisons are made with other measurements.